

第3回制御理論ワーキングセミナー

日時：2013年11月12日（火） 15:00 ~ 17:00

会場：名古屋大学 東山キャンパス 工学部2号館 222講義室

(キャンパスマップ：<http://www.nagoya-u.ac.jp/access-map/index.html> /)

Speaker：Dr. Yang Shi

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Title：Networked Control Systems

- Theory and Mechatronics Applications

Abstract：

Networked control systems (NCSs) have received great attention in the control community. Network-induced limitations may be caused by the presence of a communication channel, or because of the efficient assignment of power and other resources. This framework addresses various technical issues that arise in network dynamic systems.

The presentation starts with the modeling and identification problems for networked systems. System modeling and identification are of fundamental and increasing importance in many applications. Several novel identification methods have been proposed to estimate the unknown parameters of networked systems subject to randomly missing measurements. Convergence properties of these algorithms are rigorously established. Next, a new scheme – the two-mode-dependent networked control systems (NCSs) will be discussed. Some results on the NCS design with their applications to mechatronic systems placed in a network environment will be presented. Finally, some ongoing research in my lab will be briefly introduced.

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